

U.S. Agency for International Development

Health Assessment for Southern Sudan

Executive Summary

June 10, 2003

by the Health Assessment Team: Richard Greene (team leader), Dau Aleer, Michael M'Bior, Warren Buckingham, Connie Davis, and Peter Morris

I. Development Challenge

The health status of the people of southern Sudan is among the worst in the world. UNICEF reports that under-five mortality rates range from 65 to 170 per thousand live births. WHO estimates that maternal mortality ratios in SPLM areas may be as high as 865 per 100,000 live births. The total fertility rate is estimated at 5.9 live births per woman (UNICEF). Southern Sudan is a low prevalence area for HIV/AIDS (available data indicate a HIV prevalence rate below 3%), but is at risk of a rapidly escalating epidemic. Southern Sudan has a wide range of infectious diseases and is prone to epidemics.

Causes of under-five mortality: Both UNICEF and WHO classify malaria as the number one cause of under-five mortality. UNICEF estimates that 65% of children visiting health facilities are diagnosed as malaria. Several studies suggest that resistance is emerging to both chloroquine and sulphadoxine-pyrimethamine (SP) although more regular testing is needed. Use of insecticide treated bed nets and intermittent presumptive treatment for pregnant women is very low. The UNICEF Sentinel Surveillance Survey (2001) found that one-third of children surveyed in southern Sudan suffered from diarrhea within two weeks prior to the survey. The UNICEF Multiple Indicator Cluster Survey (MICS) (1999) showed that 17% of children throughout Sudan reported recent respiratory infections. Outbreaks of measles are reported annually and neonatal tetanus is endemic in many counties. UNICEF supports annual measles and tetanus campaigns annually. However, routine immunization coverage is well less than 10%.

Maternal and Reproductive Health: Although about 77% of delivering women are assisted by an attendant, mostly of these are traditional birth attendants with little training. 94% of births take place at home (UNICEF). In addition, antenatal care coverage is low and usually lacks tetanus toxoid immunization and other services. There is a near absence of family planning and child spacing information and services.

Nutrition: The nutritional status of children and adults is poor. BEG suffers from recurrent drought and under-five wasting rates are at emergency levels. 30 – 40% of babies are reported to have low birth weights. UNICEF reports that exclusive breastfeeding rates are low. Sub-clinical vitamin A deficiency affects one of seven children in Sudan and goiter is common in areas such as the Nuba Mountains. Vitamin A supplementation occurs annually associated with polio national immunization days. Iodized salt is available in urban areas but many people prefer rock salt. Only about 30% of the population use water from a protected source and only about 20% reported having received any hygiene/sanitation information.

HIV/AIDS and other Infectious Diseases: Southern Sudan is at profound risk for a rapidly escalating epidemic due to cultural practices, a steep decline in age of sexual debut for both genders, and significant migration from high prevalence neighboring states. OFDA has funded an HIV/AIDS pilot project in Rumbek and Yei including voluntary counseling and testing and

behavior change initiatives. The annual risk of TB infection is estimated at 2%. Although 12 NGOs are presently involved in TB, there are an inadequate number of diagnostic and treatment centers. Southern Sudan also suffers from other infectious diseases such as guinea worm (the largest remaining reservoir of the disease), onchocerciasis, trypanosomiasis, schistosomiasis, and visceral leishmaniasis.

The Southern Sudan Health System: The system is based on four levels of administrative structure, the community (PHC unit), first referral (PHC center), second referral hospital, and the county health department. Progress has been made in some locations in establishing PHC structures, community health committees, delivering selected health services, and introducing cost sharing. However, overall, the system has critical constraints including lack of any Secretariat of Health budget and salaried workers, a drug system wholly dependant on foreign NGOs, supervision and information systems conducted principally by NGOs, and very limited training capability. The community level covers only about 30 percent of the population in stable areas. Although there are currently 17 NGO supported training programs, curriculums need to be updated and reference materials and student follow-up are lacking. There are approximately 8 viable local NGOs involved in health although their capabilities are limited. Other than private pharmacies and unauthorized market drug tables in urban areas, there is a near absence of formal private sector medical care.

II. Intermediate Result for Health Transformation

The Intermediate Result is to enhance primary health care (PHC) through greater reliance on local capacities. Implementation will focus on the following sub-intermediate results:

- Sub-IR 1: Expanding access/availability of high impact services and practices;
- Sub-IR 2: Increasing Sudanese capability to deliver and manage services;
- Sub-IR 3: Increasing knowledge of and demand for services and healthy practices.

A. Key Operating Principles:

- USAID will support the southern Sudan community co-managed and (eventual) co-financed PHC system as the basis for future health development.
- USAID will also support and promote, wherever feasible, the private sector.
- Interventions selected for support are those that have a direct impact on the major causes of mortality, are feasible, and constitute the optimal use of CSH funds.
- CSH funds will fully complement expected health inputs from OFDA in a manner that promotes an effective transition from relief to development.

B. Long-term Vision for the Health System (2020)

By 2020, USAID, assuming peace and economic growth, envisions a vibrant health system based on community, private, and public sector financing and management. Within this system, the public sector will have a limited but critical role. During this period, there will be transitioning from donor dependency to increasing self-reliance.

At the peripheral level, the long-term vision is for an entirely community supported system in which PHC workers are employees of their local communities, community health committees

provide direction and support, and individuals progressively assume the costs of operations and essential drugs.

Referral hospitals will be supported either by local NGOs, or in some cases, the public sector, with strong community cost sharing augmented with simple insurance schemes. With its own budget, the Secretariat of Health (SOH) will set standards and policy, conduct supervision, manage nationwide prevention and promotion programs (e.g., immunization and vitamin A supplementation), and support a national health information system. The private commercial sector (presently limited to pharmacies in urban areas) will progressively expand to cover more of the health needs of urban dwellers (and eventually many salaried workers). As private sector enterprises are established, there will be employee-based health systems in place. As they mature and diversify their funding, local NGOs (with SOH agreement) will assume supervisory and management responsibilities for PHC in selected counties.

C. Vision for USAID-supported Stable Areas at end of Strategy Period (2006)

Improved PHC Coverage: There will be improved population coverage of PHC (from less than 30% to around 60%) and improved utilization of existing facilities (from less than 0.3 to 0.5 visits per capita per year) through (1) promotion of community constructed PHC Units that are staffed, supervised, and provided with logistics and start-up drugs; (2) institution of outreach services to underserved areas; and (3) creation of a behavior change program that promotes healthy practices.

County Health Departments (CHDs): The CHDs will have annual plans, improved supervision, and a functioning information, disease surveillance, and response system. They will also take the leading role in managing key preventive services including immunization and vitamin A supplementation.

National Secretariat Level: The National Secretariat will have designed and adopted a malaria treatment and control policy, a national TB plan, and other key policies.

Training: There will be more effective and expanded training programs for the key cadres of the PHC system including updated curricula and well-qualified teachers.

Private Sector: Local NGOs will be strengthened and engaged to help implement services and programs. Support to registered private drug sellers and providers will increase the quality of care for urban dwellers with cash. Traditional birth attendants will have their skills enhanced. Women's organizations, local development and peace committees and other networks where they exist will be utilized to spread health information messages and support PHC. Community health committees will effectively co-manage and expand co-financing of PHC structures and their drug stores.

HIV/AIDS: Vulnerable high-risk groups will begin to demonstrate positive behavior changes that will lead to reducing their risk of contracting STIs and HIV/AIDS. Voluntary counseling and testing (VCT) will be introduced to enhance prevention and provide an entry point for care. The epidemic will be effectively tracked.

Financing: The SOH will have established a health budget and began paying some salaries at the CHD level. Community contributions will better compensate PHC workers and cost sharing will generate at least 10-15% of the drug and operating costs of PHC structures.

D. OFDA/CSH Complementarity, Geographic Focus, and Beneficiary Populations:

In southern Sudan, OFDA supports PHC structures; special initiatives such as guinea worm eradication; and emergency-feeding programs as needed. OFDA focuses on areas affected by Internally Displaced Persons (IDPs) and/or conflict, mostly in BEG, Jonglei, and Upper Nile. In 2002, OFDA provided about \$8.5 million to health-related activities.

During the three year life of this strategy,

- It is expected that OFDA will continue to support emergency health services for between 1 to 1.5 million beneficiaries in unstable and transitional areas as needs are assessed. OFDA will also provide support for returned IDPs in stable areas.
- CSH funds will strengthen all aspects of PHC in relatively stable, contiguous areas serving about 800,000 persons, 10% of the population of the south.
- To facilitate the development of a viable PHC system, OFDA will ask its grantees to make some changes in their support of health activities including:
 - supporting routine child immunizations instead of reliance on measles and neonatal tetanus campaigns,
 - supporting semi-annual vitamin A supplementation instead of annual distributions linked to polio NIDs;
 - promoting supervision of PHC structures by CHD staff, wherever feasible, instead of NGOs taking the lead;
- In transition areas, OFDA funded health programs will report on the four IR level service indicators listed below. This will permit USAID to report impact in a unified manner across both OFDA and CSH funded programs.
- OFDA and the Sudan Mission will carefully plan the transition from relief to development in areas becoming more stable. This will involve tailored transition plans, overlap periods, and use, if appropriate, of the same grantees.

These changes are in keeping with OFDA's policy of delivering health interventions so that they support the development of viable health systems.

E. Priority Services and Practices

Below is a list of those services and practices that are expected to have the highest impact and be cost-effectively implemented through the fragile PHC system in southern Sudan:

Child Health and Nutrition:

- Immunizations including measles and tetanus campaigns, where appropriate, and interruption of wild polio transmission
- Malaria control including use of insecticide treated nets (ITNs) and prompt treatment with an effective anti-malarial;
- Promotion of infant and young child feeding, exclusive breastfeeding, and effective growth monitoring;
- Capability of selected PHC referral centers to conduct therapeutic feeding.

- Twice yearly vitamin A supplementation;
- Treatment of acute respiratory infections and diarrheal diseases

Maternal Health and Nutrition:

- Birth planning and skilled attendance at birth;
- ANC including nutrition and intermittent presumptive treatment for malaria;
- Introduction of child spacing and family planning information and services

Environmental Health:

- Education and communication programs focused on hygiene and sanitation
- Limited latrine and well construction (linkage with UNICEF, OFDA, and other programs that specialize in this area)

HIV/AIDS and TB:

- Behavior change for high risk population to delay sexual debut, reduce multiple risk behaviors, and promote use of condoms
- Voluntary counseling and testing (VCT).
- Support for TB services provided that anti-TB drugs are available.

F. Key IR Level Indicators for USAID-supported area only:

- Increased immunization coverage rate from less than 10% DPT3 to 40% DPT3.
- New Malaria policy which identifies the most appropriate drug, endorses use of insecticide-treated nets, and intermittent presumptive treatment;
- 30% of pregnant women and children under two sleep under an ITN.
- Semi-annual vitamin A supplementation coverage of 50%.
- % of at-risk persons using condoms during last sex act with non-regular partner.

Sub- IR 1: Increased access and availability of effective services and practices

The new PHC system is severely underutilized with fewer than 0.3 visits per capita per year even in stable areas. In addition, few PHC structures have organized outreach services for those far from facilities. To improve access and availability of services at PHC facilities, USAID will work closely with local authorities to:

- Strengthen community health committees through training, supervision, tools;
- Develop regularly scheduled outreach programs through provision of bicycles and design of outreach forms and registers;
- Encourage under-served communities to construct their own PHC units;
- Support implementation of the basic package of services listed above.
- Facilitate the implementation of guinea worm, onchocerciasis, trypanosomiasis, and visceral leishmaniasis programs funded and managed by other organizations.

USAID will improve the skills of County Health Departments to plan, analyze health information, and implement countywide vitamin A supplementation and immunization programs. In addition, USAID will support an infectious disease surveillance and response program that will identify disease outbreaks and mount effective responses.

USAID will also help improve the availability of essential drugs by:

- improving management of PHC drug stores (towards eventual revolving funds);
- establishing with other donors a larger drug purchasing entity that purchases and obtains essential drugs cheaply without relying on prepackaged kits;
- helping develop an essential drug list and standard treatment guidelines;

HIV/AIDS: VCT programs will be supported in areas exceeding 3% prevalence to enhance prevention and provide an entry point for care. The latter will focus on referrals for sexually transmitted infections, TB and other opportunistic infections. USAID will support free or low cost condom distribution through health facilities and the military.

Illustrative indicators: utilization rate of PHC structures in USAID supported areas; stock out rates for key drugs at PHC structures; number of infectious disease outbreaks identified and responded to with interventions; number of persons benefiting from VCT.

Sub-IR 2: Increasing Sudanese capability to deliver and manage services

Health services are presently being provided by foreign and a few local NGOs. Sudanese are not actively involved in planning, managing, or monitoring their health system. Under this sub-IR, USAID will help build key components of the health system including:

- Developing human resource and training projections for various health cadres;
- Helping to revise the curriculum of the PHC Training Schools to be more competency based. Distribute reference materials to schools and students;
- Strengthening the technical and management capabilities of the CHDs;
- Developing training modules for community health committees and drug stores.

In the area of HIV/AIDS, the sub-IR will:

- Conduct sentinel serologic surveillance covering all accessible areas to include antenatal care attendees, STI patients, soldiers, and sex workers and undertake selected behavioral surveillance of at-risk groups.
- Train and provide technical assistance to the National AIDS Control Program.

USAID will help the Secretariat of Health to implement expected grants from the Global Fund to Fight AIDS, TB, and Malaria and the Global Alliance for Vaccines and Immunization. In addition, USAID will support the development of key policies including a National TB Plan, a Malaria control policy, further development of the cost sharing policy, and a reproductive health policy statement. Finally, USAID will work with registered private drug sellers, women's networks, village development and peace committees to incorporate health messages into their programs and to promote PHC.

Illustrative indicators: # of graduates of training schools who are placed in PHC structures; development of key policies; HIV surveillance data collected/analyzed.

Sub-IR 3: Increasing demand for services and knowledge of healthy practices

Many of the child and maternal deaths in southern Sudan are preventable, take place outside the formal health system, and are associated with inadequate care seeking behavior. There is urgent

need both to increase demand for essential services PHC services at facilities and to promote and support healthy behaviors in households. Under this IR USAID will support the design and implementation of demand creation and behavior change programs. Specific activities will include:

- design and dissemination of appropriate information, education, and communication messages and materials; design of radio programs;
- support for women's networks to promote immunization and healthy behaviors;
- design behavior change programs to help parents recognize danger signs for severe illness in children (e.g., pneumonia) and provide appropriate home care.
- dissemination of key messages and education materials in primary schools.

HIV/AIDS: USAID will support interventions targeting high impact populations (e.g., IDPs, refugees, soldiers and camp followers). Interventions under this IR will include the design of locally appropriate IEC materials. USAID will also support a BCC program targeting vulnerable youth (especially girls) with the aim of reducing high-risk behaviors.

III. Implementing Arrangements

The main implementing mechanism will be an umbrella cooperative agreement with capability to sub-grant to US, international, and local NGOs. The cooperating agency (CA) will also be able to procure drugs through an authorized source. To implement HIV/AIDS activities, the Mission will engage either a qualified CA or send field support funds to USAID/W to access an HIV/AIDS mechanism. The mission may also want to use field support funds to access USAID/W technical assistance for training.

IV. Gender

Women in Sudan have lower status, lack access to education, are victims of violent conflict, and are severely marginalized. USAID will actively promote the training and placement of female health workers, currently under-represented in the system. This strategy targets women in all of its programs. USAID will support provision of maternal and reproductive health services including ANC, skilled attendance at birth, and child spacing. In addition, women will be the chief targets of BCC and IEC efforts to promote their own health and to better care for their children. All key indicators, where feasible, will be disaggregated by sex to monitor equity in service delivery.

V. Linkage With Other USAID Programs

Under the basic education program, primary schools can incorporate key health promotion and prevention messages such as the importance of hygiene and immunization. In the area of food security, a program that provides small milling equipment to women's groups could free up more women to participate in local health programs. Infrastructure support that helps introduce radio will have direct benefits for health. Radios can be provided to trained health workers and their mobilized communities to hear public service announcements, alerts to disease outbreaks and control recommendations, and health education programs.